

### **ABSTRACT OF THE INVENTION**

An optical fiber, and a method of making such optical fiber, wherein the optical fiber exhibits a beatlength greater than about 0.5 meters, and the fiber is spun to provide a polarization mode dispersion in the spun state of said fiber which is less than  $0.05 \text{ ps/km}^{1/2}$ . The fiber is spun by employing a spin having a spin repeat distance of at least 1 meter and a plurality of varying spin reversal distances occurring within the spin repeat distance. The spin preferably alternates between clockwise and counterclockwise directions.